Emergency Power Reliability Considerations for Hospitals and Skilled Nursing Facilities Treating Coronavirus Patients in Los Angeles County – March 10, 2020

As federal, state and local public health officials collaborate with hospitals and skilled nursing facilities in the collective battle to tackle the Coronavirus threat, Powered for Patients is providing the following guidance for critical healthcare facilities whose emergency power system relies on a single generator.

Powered for Patients has continued to monitor news reports about a potential shortage of respirators should the scale of the outbreak reach a level where tens of thousands of Americans need respirators.

Hopefully things won't get to that point but public health leaders need to prepare for all possibilities. On this front, Powered for Patients has provided guidance material to federal, state and local public health officials about the risk associated with emergency power systems that rely on a single generator.

16% of Los Angeles County hospitals use only a single generator and nearly all Skilled Nursing Facilities (SNFs), including those licensed to provide respirator care for patients, rely on a single generator. Facilities relying on a single generator for emergency power support have no redundant emergency power in the event that their single generator fails. This represents an increased risk that should be considered by public health officials and those operating hospitals and SNFs with single generator emergency power systems.

It's important to note that with proper maintenance, single generators may have a low risk of failure. Yet, the consequences of losing emergency power in a facility with a single generator are for more serious than the loss of a single generator in a facility with multiple generators.

Testing Recommendation

Facilities currently treating or slated to receive Coronavirus patients should consider testing their emergency power system prior to receiving patients (or prior to receiving additional patients.) This suggestion reflects a lesson learned this past fall in California. In the face of a warning from Southern California Edison (SCE) of a pending Public Safety Power Shutoff (PSPS), a hospital took the pro-active step of testing its two generators. The test triggered the failure of one of the hospital's two generators and repair of the failed unit took a significant amount of time. Fortunately in this case, the PSPS was never triggered so the facility continued operating on utility power.

During a second SCE Public Safety Power Shutoff last year, a hospital just outside of Los Angeles County suffered a failure of its emergency power system. Thankfully in this case, the hospital was served by two lines from SCE and the utility was able to maintain utility power to the hospital through the secondary line. Failures of emergency power during last year's Public Safety Power Shut Offs were not limited to hospitals. During a Pacific Gas & Electric shut off, five sub-acute skilled nursing facilities licensed to provide respirator care suffered failures of emergency power. These hospital and nursing home emergency power system failures underscore the reality that even with proper maintenance and testing, emergency power systems can and do fail.

A test of an emergency power system prior to receiving a coronavirus patient can provide peace of mind that a facility's emergency power system is working properly. Should this test trigger a failure, a facility has the opportunity to quickly address the problem with its service provider while utility power is still available.

Best Practices in Safeguarding Emergency Power

In 2017, Powered for Patients, in conjunction with the Rhode Island Emergency Management Agency, published *Protecting Patients When Disaster Strikes*, an emergency power resilience Playbook that detailed the critical steps key stakeholders can take to safeguard emergency power and expedite prioritized power restoration when emergency power failures cannot be avoided. This Playbook includes information from FEMA Guidance Document P-1019 that includes a checklist of steps facility managers can take before, during and after disasters to minimize the risk of an emergency power system failure. The Playbook also includes a spare parts inventory and fuel consumption checklist that facility managers can use to stay on top of fuel supply and help ensure that sufficient generator supplies and consumables are on hand at a facility at all times. Both of these resources are available online in a single document.

Any individuals needing additional information about emergency power resilience can contact Powered for Patients Project Director Eric Cote at cote@poweredforpatients.org or by calling 401-374-8500.

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